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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/563,783	04/10/2007	Kurt Knopfler	ZUMST1.006APC	3205
20995 7590 12/23/2008 KNOBBE MARTENS OLSON & BEAR LLP 2040 MAIN STREET FOURTEENTH FLOOR IRVINE, CA 92614				
EXAMINER				
BELL, WILLIAM P				
ART UNIT		PAPER NUMBER		
1791				
NOTIFICATION DATE		DELIVERY MODE		
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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# Office Action Summary

**Application No.**

10/563,783

**Applicant(s)**

KNOPFLER, KURT

**Examiner**

WILLIAM P. BELL

**Art Unit**

1791

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-9 is/are rejected.
- 7) ☒ Claim(s) 5 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 06 January 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  - ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-946)
- 3) ☒ Information Disclosure Statement(s) (PTO/SE-08)
- Paper No(s)/Mail Date 1/6/2006
- 4) ☐ Interview Summary (PTO-413)
- Paper No(s)/Mail Date \_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_

## **DETAILED ACTION**

### ***Claim Objections***

1. Claim 5 is objected to because of the following informalities: the phrase "tool is provided with to separating planes" in line 2 appears to be in error. For the purpose of compact prosecution, examination will be conducted on the assumption that this phrase should read as --tool is provided with two separating planes--. Appropriate correction is required.

### ***Claim Rejections - 35 USC § 112***

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 6-9 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

4. Claim 6 recites the limitation "the transfer arm" in line 2. There is insufficient antecedent basis for this limitation in the claim.

5. Claim 7 recites the limitations "the core" and "the stack gripper" in line 2. There is insufficient antecedent basis for these limitations in the claim. For the purpose of compact prosecution, examination will be conducted on the assumption that "according to claim 1" in line 1 of claim 7 should read as --according to claim 2--, since it is claim 2 which first references a stack gripper

6. Claim 8 recites the limitation "preformed label" in lines 8 and 9. There is insufficient antecedent basis for this limitation in the claim.
7. Claim 9 recites the limitation "label" in line 5. There is insufficient antecedent basis for this limitation in the claim.

***Claim Rejections - 35 USC § 102***

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

9. Claims 1 and 8 are rejected under 35 U.S.C. 102(b) as being anticipated by Muller (U.S. Patent No. 6,790,400). Regarding claim 1, Muller teaches a handling system for an injection molding machine (see column 5, lines 15-16) wherein an application, for example a label, is inserted in the mold cavity of an injection molding tool before injection molding, when for example a beaker having the label on the outer circumference is fabricated by injection molding (see column 5, lines 17-19), wherein a preforming apparatus for the label is provided outside the injection molding tool (see column 9, lines 61-68 and gripping means 405-407 in Figures 22 and 24), has a feeder for the label (see column 9, line 62 and magazines 400-402 in Figure 21) and a preform into which the label is introduced by the feeder and is thus preformed to the shape in which it is to be inserted in the injection mold (see column 10, lines 1-4 and cones 403 in Figures 24, 26, and 28); and a transfer apparatus removes the preformed label from

the preform and delivers it to the injection mold (see column 10, lines 35-46 and transfer arms 500 in Figure 33), wherein the preform is decouplable from the feeder and moveable into a position different from it (see Figures 24, 26, and 28, wherein cores 403 move into and out of position with the feeder and preforming means).

Regarding claim 8, Muller teaches a method for inserting an application in the injection mold of an injection molding machine (see column 1, lines 18-21), wherein the application is preformed in a preforming apparatus into the form in which it is to be inserted in the injection mold (see column 9, lines 61-68 and items 405-407 in Figures 22 and 24), whereupon a preform with the preformed application (see cones 403 with labels 408 in Figure 29) is decoupled from the preforming apparatus and transferred to a delivery station (see Figure 33, wherein cones 403 with labels 408 have been moved away from the preforming apparatus), in which the preformed label is removed from the preform (see Figure 36, wherein labels 408 have been removed from cones 403) and subsequently transferred to the injection molding tool (see column 11, lines 7-13), whereupon the preformed label is inserted in the injection mold (see column 11, lines 15-19).

10. Claims 1-3 and 9 are rejected under 35 U.S.C. 102(b) as being anticipated by Mito (Japanese Patent Application Publication No. JP-2001-06288, already of record). Regarding claim 1, Mito teaches a handling system for an injection molding machine (see Figure 1 and [0001]) wherein an application, for example a label, is inserted in the mold cavity of an injection molding tool before injection molding, when for example a beaker having the label on the outer circumference is fabricated by injection molding

(see [0015]), wherein a preforming apparatus for the label is provided outside the injection molding tool (see false core 4 in Figure 1 and [0011]), has a feeder for the label (see process (a) and label L in Figure 1) and a preform (see attaching part 41 in Figure 1) into which the label is introduced by the feeder and is thus preformed to the shape in which it is to be inserted in the injection mold (see [0011]); and a transfer apparatus (see false cavity 5 and insertion zipper 3 in Figure 1) removes the preformed label from the preform and delivers it to the injection mold (see [0013]-[0015]), wherein the preform (see attaching part 41 in Figure 1) is decouplable from the feeder and moveable into a position different from it (see Figure 1, wherein attaching part 41 transfers between the feeder and the false core 4 in step (d)).

Regarding claim 2, Mito teaches an apparatus wherein a transfer carriage (see false core 4 and attaching part 41 in Figure 1) is provided with at least one transfer arm (see false core 4 in Figure 1) on which the preform (see attaching part 41 in Figure 1) is mounted, and the transfer carriage is moveable into a delivery station (see false cavity 5 in Figure 1) in which a core (see attaching part 31 in Figure 1) of a stack gripper (see insertion zipper 3 in Figure 1) engages into the preform for transferring the preformed label (see step (h) in Figure 1), whereupon the stack gripper is moveable into the opened injection molding tool to transfer the preformed label to the injection mold (see steps (j)-(k) in Figure 1).

Regarding claim 3, Mito teaches an apparatus wherein on the stack gripper (see insertion zipper 3 in Figure 1) a core is provided (see attaching part 31 in Figure 1)

which engages in the preform and takes up the preformed label (see step (i) in Figure 1 and [0014]).

Regarding claim 9, Mito teaches a preforming apparatus for an application to be applied to an injection molded article, wherein a support (see attaching part 41 in Figure 1, which supports the label L) is insertable into a preform (see false cavity 5 and step (h) in Figure 1) and supports the application on the inner circumference of the preform until a holding mechanism provided on the preform takes over the holding of the label in the preform (see [0013]).

### ***Claim Rejections - 35 USC § 103***

11. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

12. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Mito as applied to claims 1-3 above, and further in view of Miller (U.S. Patent No. 5,527,173). Mito does not teach removal grippers mounted on the stack gripper for removal of finished injection molded parts from the injection molding tool. In the analogous art of producing plastic articles with inserts, Miller teaches an apparatus wherein a carrier plate serves to both load mold inserts into an injection mold and remove molded articles from the mold (see column 1, line 66 through column 2, line 2). It would have been obvious to one of ordinary skill in the art at the time of the invention to have modified the

apparatus taught by Mito with means for simultaneously removing molded articles from the injection mold, as taught by Miller, for the benefit of improving cycle time by eliminating the need for separate mechanisms to traverse in and out of the open mold (see column 6, lines 4-7).

13. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Mito as applied to claims 1-2 above, and further in view of Herbst (U.S. Patent No. 6,548,006). Mito does not teach the application of his apparatus to a stack mold wherein two sets of cavities mounted in different planes within the injection mold would require separate handling systems for insertion of labels, as recited in claim 5. In the analogous art of handling systems for injection molding, Herbst teaches that the configuration of a handling system for a stack mold is a simple multiplication of the configuration applied to a simple fixed/moveable mold system (see column 2, lines 9-16). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to have duplicated the handling system taught by Mito for application to a stack mold with two separating planes for the benefit of the increasing productivity commonly associated with stack molds.

14. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Muller as applied to claim 1 above. Muller does not explicitly teach that the preform (cone 403) is mounted decouplably and couplably on the transfer arm or a corresponding element of a transfer apparatus. As shown in Figure 26, core 403, which functions as the preform as described above) is mounted on support plate 404 (which acts as part of the transfer apparatus) via carriage 409. It would have been obvious to one of ordinary skill in the



art at the time of the invention that the mechanism for attaching core 403 to support plate 404 via carriage 409 would have included means for removing the core from the plate, if only for replacing damaged cores. Such an attachment mechanism would therefore be both couplable and decouplable from the support plate 404.

15. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Mito. Mito does not explicitly teach that the core (attaching part 31) is mounted decouplably and couplably on the stack gripper (insertion zipper 3) or another element of the handling system. However, it would have been obvious to one of ordinary skill in the art at the time of the invention to have manufactured the core separately from the stack gripper and mounted it in a decouplable manner, via standard attachments means such as bolts, to the stack gripper.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to WILLIAM P. BELL whose telephone number is (571)270-7067. The examiner can normally be reached on Monday - Thursday, 8:00 am - 5:30 pm; Alternating Fridays, 8:00 am - 4:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Crispino can be reached on 571-272-1226. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Wpb

/Richard Crispino/  
Supervisory Patent Examiner, Art Unit 1791